SECTION C
STATEMENT OF WORK

C.1 MOAB PROJECT INTRODUCTION

C.1.1 Task Order Purpose and Overview

This is a Cost-Plus-Award Fee (CPAF) Task Order issued under the Indefinite Delivery Indefinite Quantity (IDIQ) Contract DE-AM09-05SR22XXX. This task order reflects the application of approaches and techniques that emphasize results/outcomes and minimize "how to" performance descriptions. The contractor has the responsibility for total performance under the task order, including determining specific methods for accomplishing the work. The purpose of the task order is to remediate a portion of the Moab Site in Utah to appropriate surface clean-up standards as specified in 40 Code of Federal Regulations (CFR) Part 192; Subparts A, B, and C, and to dispose of Residual Radioactive Material (RRM) in a Nuclear Regulatory Commission (NRC) approved disposal cell near Crescent Junction, Utah. (Reference Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, September 2005). Hereinafter, RRM (Attachment A) would be used throughout the SOW to reference the tailings and other contaminated materials from former uranium/vanadium processing.

C.1.2 Task Order Objectives

1. Complete the Final Remedial Action Plan and obtain NRC approval.
2. Excavate 2.25 million tons of RRM (Attachment A) from designated areas at the Moab site.
3. Management and handling of waste (RRM) which includes but is not limited to all activities necessary for determining the method or design of waste management and waste handling systems, necessary construction and/or installation implementation of the waste management and waste handling systems/methods and operation of such systems or methods in order for the RRM and other waste to be removed and shipped for disposal at Crescent Junction
4. Shipment of the 2.25 million tons of RRM, primarily by rail, as required by the ROD to Crescent Junction.
5. Excavation of a portion of a RRM disposal cell at Crescent Junction in accordance with the NRC approved Remedial Action Plan.
6. Waste management of the RRM at the Crescent Junction site, transfer and handling, and placement of the 2.25 million tons of RRM in the Crescent Junction disposal cell.
7. Sequential installation of the disposal cell cover, as approved by the NRC and in a manner that minimizes the amount of RRM exposed.
8. All work including construction, if any, and building, if any, shall be performed in a safe manner and in full compliance with all applicable laws, permits, and DOE Orders and in accordance with the requirements of the SOW..

C.1.3 Contractor Performance

The contractor shall furnish all personnel, facilities, equipment, material, services and supplies (except as set forth in this contract to be furnished by the DOE or others), and otherwise do all things necessary to accomplish work in a safe, integrated, effective and efficient manner in accordance with the terms and conditions of the task order. In performing the work, the contractor shall comply with all applicable DOE orders and Local, State and Federal regulations.

The contractor shall be responsible for planning, integrating, managing and executing the programs, projects, operations and other activities as described in this SOW.

The contractor shall be responsible for providing project management functions to enable the safe enclosure of Moab the site. In addition, the contractor is responsible for the operations, environment, safety, health and quality control within its own organization.

C.1.4 Integrated Execution Plan (IEP)

DOE's contracting approach for the Moab project includes a Remedial Action contractor (RAC), which is the contractor for this task order, and a Technical Assistance contractor (TAC). The RAC/TAC model was previously used by the DOE Uranium Mill Tailings Remedial Action (UMTRA) program in the successful management of 22 UMTRA sites. S.M. Stoller Corp. currently performs as the TAC for the Moab project. The RAC shall develop a comprehensive approach that that integrates RAC (hereinafter referred to as "contractor") and TAC activities to achieve safe and efficient work in support of the Moab Project Mission.

a. The contractor shall provide an Integrated Execution Plan (IEP) addressing coordination and communication with the existing TAC. The IEP shall be submitted to DOE not later than 60 days following task order award. The contractor shall address Sections C.1.4.b and C.1.4.c in the IEP.

b. Integrated Safety and Quality - The contractor shall integrate its overall safety and quality function with that of the TAC including the TAC's Integrated Safety Management System (ISMS), quality assurance plans, and construction management plans. The contractor shall have their own ISMS, quality assurance plans, and any other plans required by this task order.

c. The functions delineated below are the responsibilities or functions that will be performed by the contractor. Also listed are the functions and responsibilities of the TAC. These functions will require interaction between the two contractors and will need to be integrated and coordinated during performance of the task order and addressed in the IEP.

i. The TAC will maintain and input project funding information into various DOE systems, such as the Integrated Planning, Accountability, and Budgeting System

(IPABS). The RAC will provide information to the TAC for input into those DOE Systems.

ii. The TAC is responsible for programmatic implementation of safeguards and security and the compliance with the TAC's safeguards and security program.

iii. The RAC will be responsible for safeguarding property in its possession, as well as the RRM, including during shipments.

iv. The RAC is responsible for site access control to radiological areas and for compliance with DOE Notice 206.3, Personal Identity Verification and any and all other badging requirements of DOE at the Moab and Crescent Junction sites. The RAC shall develop a unique badge style that will only be honored at the Moab and Crescent Junction sites.

v. The TAC is responsible for Change Control Administrative Functions. The RAC is responsible for change control as specified in Section H.900 of the task order. The RAC will provide information, as requested, for the TAC's change control administrative functions.

vi. The TAC is responsible for the Information Technology (IT) Infrastructure at the Moab and Crescent Junction sites. The RAC is responsible for performing its internal IT functions.

vii. The TAC has responsibility for the Public Affairs Functions. Section C. 4, Public Involvement and Stakeholder Interaction, identifies the RAC's responsibilities under this task order.

viii. The TAC has responsibility for the Records Management of the overall the project. The RAC is responsible for performing its own internal records management functions including the records management requirements contained in this task order and the basic contract.

ix. The TAC is responsible for maintenance of communications systems, including the communication systems of the RAC. These systems include phones, laptops, walkie talkies, cell phones, and other similar communication items.

x. The TAC has responsibility for the design, implementation, operation, and maintenance of Interim Ground Water corrective actions.

d. The TAC does not have the authority to direct the contractor under this task order. If the TAC's performance of the above functions interferes with the ability of the contractor to perform under the task order, the contractor shall notify the DCO or DCOR immediately.

C.1.5 Agency Agreements

a. The Moab project is regulated by the NRC under Title I of the Uranium Mill Tailings Radiation Control Act of 1978. DOE will be required to obtain NRC approval of the Moab Remedial Action Plan. The contractor's operations shall be conducted in accordance with the Final Remedial Action Plan (RAP) approved by the NRC. Any proposed deviations from the RAP shall be submitted by DOE to NRC for approval.

b. For the Moab project, the State of Utah has no regulatory authority with regards to the management and disposition of RRM. However, there are numerous other site activities

that fall under the purview of State regulations (fugitive dust emissions, storm water pollution prevention, etc.). To the extent the contractor is responsible for activities conducted under this task order, the contractor shall ensure that both sites, as well as the Contractor's activities, are compliant with all applicable laws and regulations. The contractor shall obtain and administer all required permits and agreements necessary to complete the requirements of this task order.

c. The Moab Uranium Mill Tailings ROD dated September 2005 is applicable to Moab and Crescent Junction activities.

C.2 ENVIRONMENTAL REMEDIATION AND WASTE MANGEMENT

C.2.1 Environmental Remediation and Waste Management Support Activities

The contractor shall perform the following Moab and Crescent Junction activities in support of its remediation and waste management activities:

a. Site access control to radiological areas at the Moab and Crescent Junction sites.
b. Operation of freshwater ponds and pumping systems (irrigation and sprinkler for dust control) at the Moab site.
c. Controlling dust at the Moab and Crescent Junction sites via water, calcium chloride application or other acceptable method. The contractor shall aggressively manage and maintain a "zero visible" level.
d. Operation of the RRM dewatering system at the Moab site.
e. Off-pile soils remediation (approximately 275,000 tons) (Attachment B) – The contractor shall remove RRM from the off-pile areas at the Moab site to meet soil cleanup standards in accordance with 40 CFR 192 Subpart A.
    i. The contractor shall haul the RRM to the top of the pile and perform verification sampling.
    ii. The contractor shall submit a completion report for each off pile area to DOE within 60 days after verification sampling is completed.
    iii. In some cases, the application of supplemental standards may be necessary. Such supplemental standards applications shall be approved by DOE and the NRC and applied accordingly by the contractor.

C.2.2 Waste Management and Handling Systems/Methods and Activities

C.2.2.1 RRM Handling and Transfer Systems/Methods

a. The contractor shall prepare, design, construct, if any, and/or install, implement,, and operate the waste management and handling systems/methods at Moab and Crescent Junction. The waste management and handling systems/methods shall be used to transfer the RRM located at the Moab site to the rail line for shipment to Crescent Junction and subsequently transfer the RRM from the rail line at Crescent Junction to the Crescent Junction disposal cell. In accordance with the September 2005 Moab Uranium Mill Tailings ROD, the majority of the RRM shall be transported primarily by rail from Moab to Crescent Junction.

i. The contractor shall use means which are safe, efficient, and cost effective to transfer the RRM in accordance with the ROD.
ii. The contractor shall be responsible for the loading and off-loading of the RRM onto rail cars for shipment between Moab and Crescent Junction.
iii. The final design or method of the RRM handling and transfer systems for the Moab and Crescent Junction sites shall be submitted to DOE for review and approval within 180 days after task order award.

b. After approval by DOE of the final design or method, the contractor shall install and operate the approved RRM handling and transfer systems/methods.

c. Any over-sized material or debris that cannot be transported via rail shall be transported to Crescent Junction in trucks via US Highway 191.

NOTE: The DOE will provide conceptual designs related to material handling systems at the Moab and Crescent Junction sites. These designs are provided for INFORMATIONAL PURPOSES ONLY and may be utilized as determined to be appropriate by the contractor. The contractor is still responsible for providing an appropriate and acceptable final design and/or system/method.

C.2.2.2 Crescent Junction Water Source

a. The contractor shall identify and provide to the DOE, within 90 days after task order award, the identified water source for dust control and RRM placement at the Crescent Junction site.
b. After DOE approval of the identified water source, the contractor shall submit the final design or plans for the water source method to the DOE within 180 days of task order award for review and approval.
c. After DOE approval of the design, plans and method, the contractor shall implement and operate the method/system for the approved water source for dust control and RRM placement prior to disposal cell excavation.

NOTE: The Department has identified water sources such as trucking or piping water from the Green River and/or the Colorado River, or connecting to an existing privately-owned well system approximately 17 miles south of Crescent Junction adjacent to U.S. Highway 191. The contractor may choose to use these options and/or develop different options. The contractor is still responsible for identifying and submitting an appropriate and acceptable water source design to the DOE.

C.2.3 Final Remedial Action Plan

a. The contractor will prepare a final RAP for NRC approval. The contractor will be provided a Draft RAP, which shall be used as the basis for the preparation of the final RAP.

b. The final RAP shall contain disposal cell drawings and specifications in a level of detail suitable for competitive bidding purposes. (The foregoing should not be interpreted as requiring the contractor to subcontract out the activities identified in Section C.2.4).

c. The contractor shall submit the final RAP to DOE within 240 days after task order award. The DOE will review, and if approved, submit to NRC for review and approval. If the final RAP is not approved by DOE, the contractor shall address and resolve all comments until the final RAP is approved by DOE. If the final RAP is not approved by the NRC, the contractor shall address and resolve all comments as determined necessary by DOE.

C.2.4 Remedial Action

C.2.4.1 Disposal Cell

a. The contractor shall excavate a portion of the disposal cell at Crescent Junction. The contractor shall place the RRM in the Crescent Junction disposal cell in accordance with the NRC approved final RAP. Such excavation and placement shall be proportionate with the volume of RRM identified in this task order for removal from the Moab site.

b. The contractor shall perform the work in stages in order to prevent excessive areas of the cell remaining open while awaiting arrival of the shipments of the RRM for placement in the disposal cell.

C.2.4.2 Excavation and Waste Management of RRM and Other Waste

a. The contractor shall prepare and submit an Excavation Plan for the Moab site which includes but is not limited to the details of the planned excavation method, the excavation sequence, mixing of slimes and sands, segregation of oversize materials and water management.

b. The excavation plan shall be submitted to DOE for review and approval within 180 days prior to commencement of excavation activities.

c. The contractor shall excavate approximately 2.25 million tons of RRM in accordance with the final RAP and the approved excavation plan. Mixing of sands and slimes may be necessary in order to achieve acceptable moisture levels in the RRM for shipment and disposal at Crescent Junction. If the contractor elects to dry the RRM by spreading the RRM in contaminated areas of the Moab project site, the drying of RRM within the 100 year floodplain shall be conducted only with the prior written approval of the Contracting Officer.

d. The contractor shall develop and implement a method for managing water during the performance of these activities in accordance with the approved excavation plan.

e. Although the majority of material to be excavated and disposed of is expected to be managed as RRM, other waste may be encountered that may require special handling. The contractor will manage this waste in accordance with the Moab Waste Management Plan.

C.2.4.3 Shipment of RRM to the Crescent Junction Disposal Cell

C.2.4.3.1 Rail Shipments

a. In accordance with the September 2005 Moab Uranium Mill Tailings ROD, the majority of the RRM shall be shipped by rail via the Union Pacific Cane Creek Branch Line. The contractor shall be responsible for making and entering into arrangements with Union Pacific for the transportation of the RRM. The RRM shall be transported in accordance with the U.S. Department of Transportation special permits for the transportation of radioactive materials.

b. The contractor shall prepare a final design for and make and complete any necessary rail improvements or upgrades for the transportation of the RRM.

c. The contractor is responsible for obtaining and negotiating any applicable permissions and making all arrangements with Union Pacific for the rail transportation and improvements to the rail upgrades. Any rail upgrades or improvements to the rail on the Moab or Crescent Junction sites is subject to the approval of DOE, not Union Pacific, except to the extent necessary to ensure the rail cars can connect to the Union Pacific train/engines. The contractor shall submit the final design for any rail improvements and/or upgrades to DOE for review and approval within 180 days of task order award.

NOTE: DOE will provide conceptual designs relating to rail shipments for INFORMATION PURPOSES ONLY purposes which can be used as determined to be appropriate by the contractor. The contractor is still responsible for providing its acceptable final design and methods to the Department.

C.2.4.3.2 Truck Shipments to the Crescent Junction Disposal Cell

a. Oversized materials and/or debris that cannot be shipped by rail shall be transported to the Crescent Junction disposal cell by contractor-provided trucks via U.S. Highway 191. The contractor is also responsible for the trailers as well as the intermodal units or any other units used to transport the waste by truck. The shipments shall be made in accordance with the U.S.

Department of Transportation special permit for the transport of radioactive materials.

C.2.4.4 Disposal of RRM

a. The contractor shall place and compact the RRM into the Crescent Junction disposal cell in accordance with the approved lift thickness, moisture content, and compaction specification identified in the NRC approved RAP. The contractor is responsible for removal of the RRM from the rail cars and/or trucks and transferring to the disposal cell for placement and compaction.

b. The contractor shall develop and operate an RRM water management system that results in effective excavation, transport and disposal and compaction of the RRM.

c. The contractor shall manage contaminated water in order to achieve the RRM placement criteria as described in the NRC approved RAP.

C.2.4.5 Cell Cover

The contractor shall perform all activities necessary to prepare and install the disposal cell cover in accordance with the final RAP as approved by the NRC. In order to minimize the amount of RRM exposed in the disposal cell, the contractor shall sequence the cell cover installation with the RRM placement.

C.2.4.6 Decontamination

It is anticipated that decontamination activities will be required to control radiological contamination for all Moab and Crescent Junction site activities. The contractor shall control radiological contamination for all activities under this task order in compliance with 10 CFR 835 and all other applicable regulations. The contractor shall submit a plan for controlling radiological contamination to DOE for review and approval within 180 days of task order award.

C.3 PROJECT SUPPORT

C.3.1 Project Control Systems and Reporting Requirements

a. The contractor shall develop and submit a project baseline in accordance with DOE Order 413.3A and Section H.900, Project Control Systems and Reporting Requirements, within 90 days of task order award.

b. The contractor shall perform project control and reporting functions in accordance with Section H.900, Project Control Systems and Reporting Requirements.

c. In addition to the requirements identified in Section H.900, the contractor shall provide a Weekly Report (narrative only) to DOE describing the current project status.

C.3.2 Integrated Safety Management System (ISMS)

a. The contractor shall develop and maintain a single ISMS for all of the work performed under this task order at both the Moab and Crescent Junction sites as required by DEAR 952.5223-1, "Integration of Environment, Safety, and Health into Work Planning and Execution". The contractor's ISMS shall ensure safety considerations are integrated throughout the entire work planning and execution process.

b. The contractor shall submit its ISMS to DOE for review and approval no later than 90 days after task order award.

c. The ISMS program shall be subject to an annual verification review conducted by DOE.

C.3.3 Risk Analysis Report and Management Plan

a. In addition to the requirements of H.900, Project Control Systems and Reporting Requirements, the contractor shall develop a Risk Analysis Report and Management Plan identifying the key areas of cost and schedule risk for the scope of work and identify specific mitigating measures.

b. The Risk Analysis Report and Management Plan shall be submitted to DOE for review and approval 90 days after task order award.

c. The contractor shall review the Risk Analysis Report and Management Plan periodically and provide revisions, if necessary.

C.3.4 Environment, Safety, and Health (ES&H) Program

The contractor shall maintain an ES&H program to ensure the protection of the workers, the public and environment. The contractor's ES&H program shall be operated as an integral, but visible part of how the contractor conducts business. This includes prioritizing work planning and execution, establishing clear ES&H priorities, allocating resources to address programmatic and operational considerations, collecting and analyzing monitoring data, and addressing all hazards for all operations and work. The contractor shall ensure that cost reduction and efficiency efforts are fully compatible with ES&H performance. (See Section H.905 for additional requirements)

a. The contractor is responsible for all environmental compliance activities, including the obtaining of permits, associated with the contractor's performance of all activities. The contractor shall conduct all activities in compliance with environmental protection requirements including, but not limited to, those listed in Section J.

b. The contractor shall maintain an ES&H program to ensure the protection of the workers, the public and environment in accordance with the SOW. The program shall be applicable to subcontractors performing work on the Moab and Crescent Junction sites. It is the contractor's responsibility to ensure that all subcontractors performing work on the sites comply with the program.

c. The contractor shall adopt the existing DOE Storm Water Pollution Prevention Plan (SWP3) at the Moab site. The contractor shall develop and maintain a Storm Water Pollution Prevention Plan (SWP3) for the Crescent Junction site. The contractor shall submit to DOE an inspection report prepared after monthly inspections in accordance with the plans and also an inspection report that shall be prepared after each significant precipitation event.

d. The contractor shall adopt and be responsible for the existing Site Air Monitoring Program at both the Moab and Crescent Junction sites. The contractor shall provide to DOE for review and approval, on a quarterly basis, data from the site air monitoring program by the 10th day of the month following the quarter for which the data is to be reported.

e. The contractor shall prepare and submit a Moab Project Health and Safety Plan to DOE for review and approval within 90 days of task order award. The contractor may submit a new plan or may adopt the existing Moab Project Health and Safety Plan and make necessary revisions. Regardless, the contractor shall ensure that its Plan addresses and encompasses all of the work to be performed under this task order at both sites. The Plan shall also be applicable to subcontractors performing work on the sites and it is the contractor's responsibility to ensure that all subcontractors performing work on the sites comply with the Plan.

f. Upon award of the task order, the contractor shall adopt the existing Radiation Protection Program (i.e., the 10 CFR 835 Radiation Protection Plan) and make any necessary modifications for the contractor's activities under this task order.

g. The contractor shall provide a Quarterly Radiation Exposure Report, providing whole body doses for both Government and contractor site workers for which exposure data is collected, to DOE for review and approval by the 10th day of the month following the quarter for which the data is to be reported. Reporting of exposure data applies to the Moab and Crescent Junction sites.

h. The contractor shall provide all personal protective equipment in accordance with 10 CFR 835, Radiation Protection Plan, for all personnel entering the Moab Project (Moab and Crescent Junction sites). At a minimum, the contractor shall provide rubber boots and gloves in all contaminated areas at the Moab project. Depending on the work activity, the contractor shall provide protective clothing when necessary.

i. The contractor shall provide the following training to all contractor, DOE employees, and subcontractor personnel:

    1. All required OSHA training.
    2. DOE Radiological Worker II training in order to comply with training requirements in 10 CFR 835.
    3. Exclusive Use Shipping Requirements Training in accordance with applicable DOT regulations.
    4. Emergency Response Training associated with any RRM shipments.

    The contractor shall also be responsible for providing DOT Federal Motor Carrier Regulations training.

j. The contractor shall prepare and submit a Moab Emergency Response Plan within 90 days of task order award to DOE for review and approval. The contractor may submit a new plan or

may adopt the existing Moab Emergency Response Plan and make necessary revisions. However, the contractor shall ensure the Moab Emergency Response Plan addresses and encompasses all of the work to be performed under this task order at both sites.

C.3.5 Quality Assurance

In accordance with DOE Order 226.1 *Implementation of Department of Energy Oversight Policy, Appendix A,* the contractor shall develop a comprehensive and integrated assurance system with quality assurance requirements (as stated in 10 CFR Part 830, Subpart A, or other applicable regulations). The system shall cover the operational aspects such as environment, safety, and health; safeguards and security; cyber security; emergency management; and business operations. The contractor's Quality Assurance Plan meeting the above requirements shall be submitted to DOE for review and approval within 120 days of task order award.

C.3.6 Programmatic Support and Other Activities

The contractor shall provide information, documentation, and other assistance to DOE as required in responding to issues regarding both sites such as mineral rights, water rights, Bureau of Land Management (BLM) and Department of Transportation (DOT) processes, and other similar issues that pertain to the contractor's activities at the sites.

C.4 PUBLIC INVOLVEMENT AND STAKEHOLDER INTERACTION

The contractor will provide information and support to DOE and the TAC in occasional stakeholder/public meetings, held primarily in Moab, Utah.

SECTION C
STATEMENT OF WORK

Attachment A

RRM Waste Composition
(TBD)

SECTION C
STATEMENT OF WORK

Attachment B

Off-Pile Waste Composition
(TBD)